UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,527	03/03/2004	Dimitri Saey	1875.4880001	3355

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EXAMINER
LEE, SIU M

ART UNIT	PAPER NUMBER
2611	

MAIL DATE	DELIVERY MODE
04/01/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)
	10/791,527	SAEY, DIMITRI
	Examiner	Art Unit
	SIU M. LEE	2611

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED <u>03 February 2010</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

   a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.

   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

      Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

<u>NOTICE OF APPEAL</u>

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

<u>AMENDMENTS</u>

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because

   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ They raise the issue of new matter (see NOTE below);

   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

      NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1-4, 7-11, 14-16, 19-23, 26, 28-31*.

   Claim(s) withdrawn from consideration: _____.

<u>AFFIDAVIT OR OTHER EVIDENCE</u>

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

<u>REQUEST FOR RECONSIDERATION/OTHER</u>

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>See Continuation Sheet.</u>

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____

13. ☐ Other: _____.

/CHIEH M FAN/
Supervisory Patent Examiner, Art Unit 2611

Continuation of 11. does NOT place the application in condition for allowance because: Applicant's argument:

Page 12, the applicant argues that Peeters does not explicitly disclose that a worse case SNR of the individual carriers in each carrier subset SUBSET1 through SUBSET8 is one of the parameters of this constellation information message as recited by independent claims 1, 8, 15, and 20.
Page 13, the applicant points out that Peeters merely provides how the number of bits for each carrier subset SUBSET1 through SUBSET8 is determined, Peeters does not disclose any relationship between the bit values for each carrier subset SUBSET1 through SUBSET8. For example, no where does Peeters discloses that bit value B1 corresponding to SUBSET1 is different from bit value B2 corresponding to SUBSET2 as alleged in the Office Action.

Examiner's response:

Independent claims 1, 8, 15, and 20 all recite a similar limitation:

"a carriergrouping means configured to determine at least one dynamically variable size carrier group for the plurality of carriers based on the parameters and a plurality of carriergroup parameters for the at least one dynamically variable size carrier group, at least one of the plurality of carriergroup parameters being a worst case parameter of the plurality of carriers within the at least one dynamically variable size carrier group".

The examiner rejected claims 1, 8, 15, and 20 under 35 USC 102(b) with Peeters (US 2001/0012783 A1). As there is no definition of what is the worst parameter, the examiner interprets "a worst case parameter of the plurality of carriers within the at least one dynamically variable size carrier group" as the bit allocation of the subset with the lowest bit allocation.

Figure 1 shows that the sub-carriers are divided into subsets and the sub-carriers in a subset carries the same number of bits, i.e. each sub-carrier in subset 1 as shown in figure 1 carries 2 bits; and each sub-carrier in subset 2 carries 4 bits (paragraph 0019). Paragraph 0021 discloses an embodiment that the carriers are grouped in subsets of carriers where the same amount of bits will be allocated to. It indicates that the number of bits within a subset is the same for all carriers. Therefore, it is inherently a subset will have the lowest bit allocation and the examiner interprets the lowest bit allocation within the subsets as the worst case parameter.

Dependent claims 3, 10, 16, and 22 further define the worst case parameter as a worst case signal-to-noise ratio of the at least one dynamically variable size carrier group.

The examiner rejected claims 3, 10, 16, and 22 under 35 USC 103 based on Peeters (US 2001/0012783 A1).

Peeters does not disclose the worst case parameter comprises a worst case signal to noise ratio (SNR). However, it is well known in the art that bit allocation of a carrier is directly proportional to the signal to noise ratio of the carrier; that is, the carrier with higher signal to noise ratio can carry more bit (higher bit allocation).
Peeters discloses sending bit allocation for the subsets for setting up the far end modem and the examiner interpret the bit allocation of the lowest bit allocated subset as the worst case parameter. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Peeters invention to send a signal to noise ratio that is proportional to the bit allocation for the subsets to the far end modem and have the far end modem to calculate the bit allocation for the subset based on the received signal to noise ratio. In this case, the subset with the lowest bit allocation will send a lowest signal to noise ratio (worst case signal to noise ratio) to the far end modem. By send the signal to noise ratio to the far end modem, it provides the benefit of reducing complex computation and power consumption on the near end modem.

Based on the above explanation, the examiner maintain the rejection of claims 1-4, 7-11, 14-16, 19-23, 26, and 28-31..